

**Constellation  
Nuclear**

Nine Mile Point  
Nuclear Station

January 28, 2002  
NMP2L 2046

*A Member of the  
Constellation Energy Group*

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

RE: Nine Mile Point Unit 2  
Docket No. 50-410  
NPF-69  
TAC No. MB3327

***Subject: Application for Amendment to the Technical Specifications Concerning  
the Safety Limit Minimum Critical Power Ratio – Response to Request  
for Additional Information***

Gentlemen:

Nine Mile Point Nuclear Station, LLC (NMPNS) hereby transmits supplemental information requested by the NRC in support of a previously submitted application for amendment to Nine Mile Point Unit 2 (NMP2) Operating License NPF-69. The initial application, dated November 20, 2001, proposed a revision to the Safety Limit Minimum Critical Power Ratio values in Technical Specification 2.1.1.2 to reflect the results of cycle-specific calculations performed for upcoming NMP2 Operating Cycle 9. The supplemental information is provided in Attachment 1 to this letter to respond to the request for additional information documented in the NRC's letter dated January 17, 2002. This information does not affect the No Significant Hazards Consideration analysis provided in NMPNS's November 20, 2001 letter.

Pursuant to 10 CFR 50.91(b)(1), NMPNS has provided a copy of this supplemental information to the appropriate state representative.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 28, 2002.

Very truly yours,

John T. Conway  
Site Vice President

JTC/DEV/cld  
Attachment

A001

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cc: Mr. H. J. Miller, NRC Regional Administrator, Region I  
Mr. G. K. Hunegs, NRC Senior Resident Inspector  
Mr. P. S. Tam, Senior Project Manager, NRR (2 copies)  
Mr. J. P. Spath  
NYSERDA  
286 Washington Avenue Ext.  
Albany, NY 12203-6399  
Records Management

**ATTACHMENT 1**

**NINE MILE POINT NUCLEAR STATION, LLC**

**LICENSE NO. NPF-69**

**DOCKET NO. 50-410**

**Responses to NRC Request for Additional Information (RAI)  
Documented in NRC Letter Dated January 17, 2002**

**RAI No. 1**

*Provide information on the reference core loading pattern for Cycle 8 and Cycle 9, including bundle name, number in core, and identification of cycle loaded.*

**Response:**

The reference core loading patterns for Nine Mile Point Unit 2 (NMP2) Cycle 8 and Cycle 9 operation are provided in Figure 1 and Figure 2, respectively. The figures also identify the fuel type, cycle loaded, and number in core for Cycle 8 and Cycle 9.

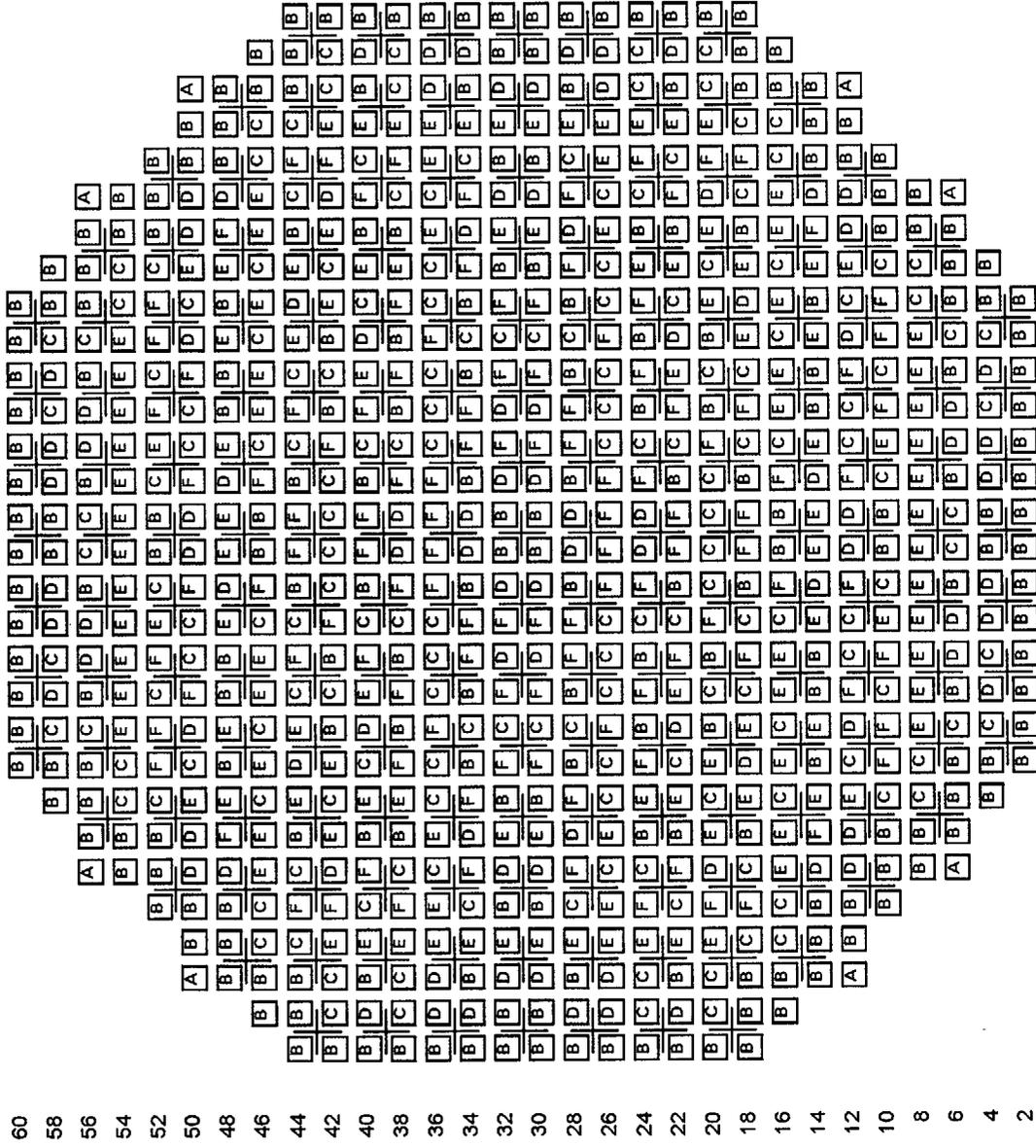
**RAI No. 2**

*Describe the difference between the reference core loading pattern for the amendment calculation and the real core loading pattern. Also, describe the procedure to deal with the difference if it occurs.*

**Response:**

At the current time there are no differences between the reference core loading pattern for Cycle 9 and the planned loading pattern. However, because the reload licensing process requires an assumption as to the condition of the core at the end of the previous cycle, it is possible that the as-loaded Cycle 9 core may not be identical to the reference core.

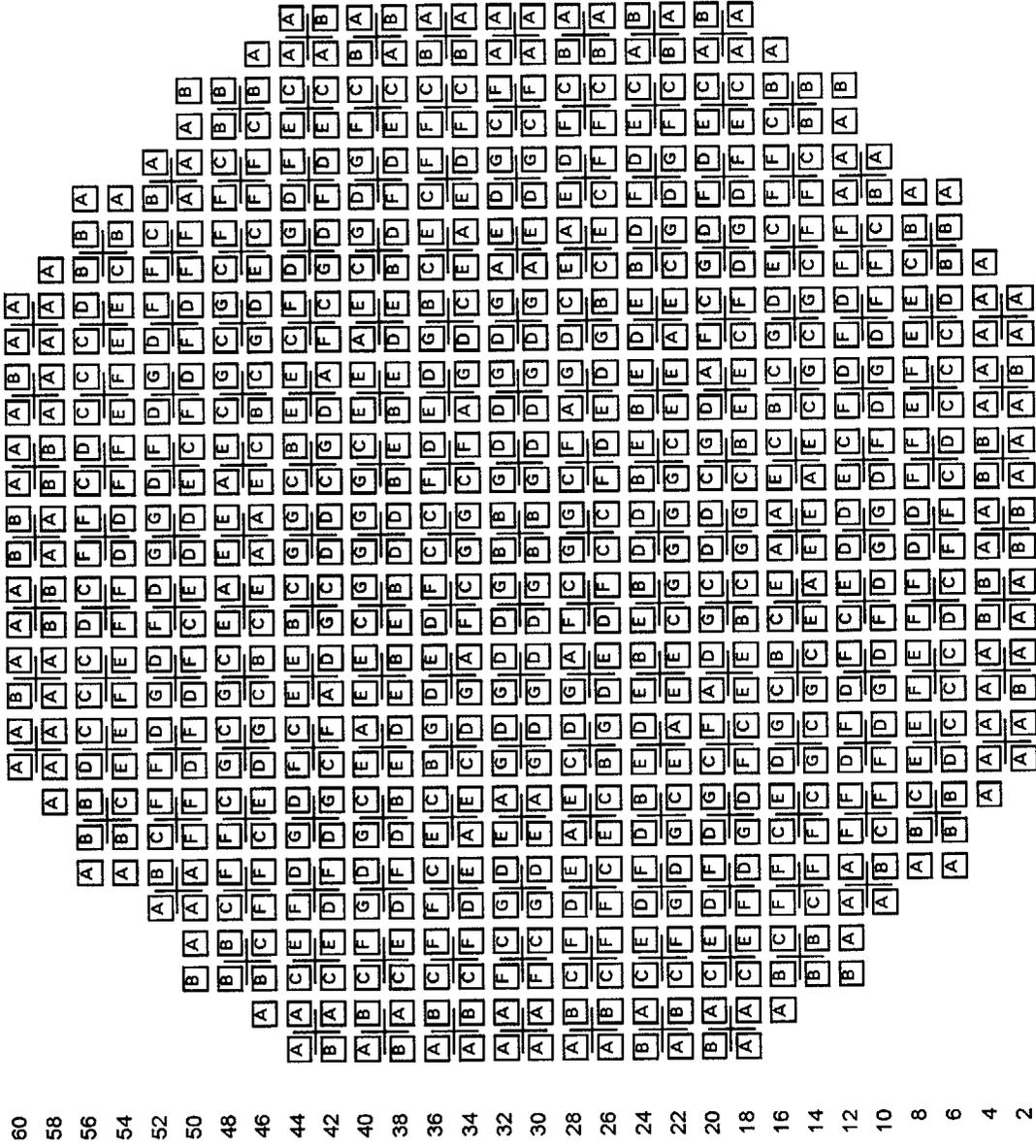
In accordance with NMP2 Technical Specification 5.6.5.b, Nine Mile Point Nuclear Station, LLC (NMPNS) uses the analytical methods described in NEDE-24011-P-A-US, "General Electric Standard Application for Reactor Fuel," U.S. Supplement (GESTAR II) to determine core operating limits. To assure that licensing basis calculations performed on the reference core are applicable to the as-loaded core, certain key parameters, which affect the licensing basis calculations, are examined to assure that there is no adverse impact. This process, including identification of the key parameters that measure the deviation between the reference core and the actual core, and the sensitivity of the licensing basis calculations to variations in these parameters, is described in Section 3.4 of GESTAR II. Only when this examination has been completed and it has been established that the as-loaded core satisfies the licensing basis will the core be operated.



1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59

Fuel Type	Cycle Loaded	No.
A=GE11-P9CUB349-10GZ1-120M-146-T	5	8
B=GE11-P9CUB375-12GZ-120T-146-T	6	236
C=GE11-P9CUB413-12GZ-120T-146-T	7	172
D=GE11-P9CUB414-13GZ-120T-146-T	7	100
E=GE11-P9CUB407-14GZ-120T-146-T-2382	8	132
F=GE11-P9CUB407-14GZ-120T-146-T-2383	8	116

Figure 1 Cycle 8 Reference Core Loading Pattern



1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59

Fuel Type	Cycle Loaded	No.
A=GE11-P9CUB413-12GZ-120T-146-T	7	136
B=GE11-P9CUB414-13GZ-120T-146-T	7	96
C=GE11-P9CUB407-14GZ-120T-146-T-2382	8	132
D=GE11-P9CUB407-14GZ-120T-146-T-2383	8	116
E=GE11-P9CUB404-12GZ-120T-146-T-2501	9	96
F=GE11-P9CUB407-14GZ-120T-146-T-2502	9	108
G=GE11-P9CUB407-14GZ-120T-146-T-2503	9	80

Figure 2 Cycle 9 Reference Core Loading Pattern